Status of Claims

Claims 1 to 8 (canceled)

Claim 9 (new) In a device for traversing a linear flexible product for winding upon a spool or core, said device including a pivotally-mounted traverse arm, a rotating traverse motor, and a link interconnecting a point on a rotating part of said traverse motor with a point on said traverse arm for imparting arcuate motion thereto over a selectable predetermined arcuate path, the improvement comprising: means for controlling rotation of said traverse motor through arcuate sectors of 180 degrees and less, such that a free end of said traverse arm moves at a substantially uniform rate of traverse over said predetermined path; means for controlling spool rotation comprising means for driving said spool at a predetermined uniform angular velocity, an electronic controller feedback means driven by rotation of said spool for generating a digital position reference signal to said means for controlling rotation of said traverse motor, said means including a program to rotate said traverse motor to a desired position corresponding to said reference signal required to move said traverse arm, disregarding any non-uniform motion created by linkage deviations, and a process control device for selecting ratio and position criteria and communicating said criteria to said controller feedback means.

Claim 10 (new) The improvements set forth in claim 9, in which said means for controlling rotation is manually adjusted.

Claim 11 (new) The improvements set forth in claim 9, in which the linear flexible product is fed coaxially with respect to a pivot axis of said traverse arm, and parallel to said arm to be discharged from said arm adjacent a free end of said traverse arm.

Claim 12 (new) The improvement in accordance with claim 11, said traverse arm including tubular guiding means adjacent said free end thereof.

Claim 13 (new) In a linear traverse mechanism for guiding the spooling of a flexible linear product, including a pivotally-mounted traverse arm dispensing said product at a free end thereof, and motor means for imparting arcuate motion to said arm, the improvement comprising: control means for sensing the instantaneous location of a free end of said arm in terms of digital data; a master control block controlling the angular direction, velocity, and position of said motor means; means for transmitting said digital data to said control block on a continuous basis; logic blocks for determining the direction of rotation of said motor means; and a logic processor having a manually entered program relative to traverse width, and starting and finishing locations on a given spool; whereby control of said motor means is dependent upon the instantaneous position of said linkage arm relative to the instantaneous position indicated by said processor.

Claim 14 (new) The improvement in accordance with claim 13, further comprising spool winding means, a motor driving said spool winding means, a digital feedback encoder sending a digital count signal to said control means, whereby motion of said traverse arm is reversed upon the attainment of a predetermined count.

Claim 15 (new) The improvement in accordance with claim 14, including means for momentarily halting movement of said traverse arm at one end of a predetermined path of movement during a partial revolution of said spool winding means.